



## WORKPLACE SAFETY AND HEALTH IN VERMONT

*From The  
National Institute for Occupational Safety and Health*



### State Profile 2002

---

*Delivering on the Nation's promise:  
Safety and health at work for all people through prevention.*

---

### The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Vermont.

### The Burden of Occupational Illness and Injury in Vermont

- In Vermont, there are approximately 322,000 individuals employed in the workforce.<sup>1</sup>
- In 2000, 15 workers died as a result of workplace injuries.<sup>2</sup>
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 4.3 deaths per 100,000 workers – below the national average rate of 4.5 deaths per 100,000 workers.<sup>2</sup>
- In 2000, there were 16,600 nonfatal workplace injuries and illnesses in Vermont.<sup>3</sup>

### The Cost of Occupational Injury and Illness in Vermont

In 2000, the most recent year for which data are available, a total of \$114.4 million was paid for workers' compensation claims by Vermont private insurers and self-insured employers.<sup>4</sup> This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

# **How NIOSH Prevents Worker Injuries and Diseases in Vermont**

## **Health Hazard Evaluations (HHEs) and Technical Assistance**

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 11 requests for HHEs in Vermont in a variety of industrial settings, including the following examples:

### ***Vermont: Health and Safety Hazards Associated with Creosote-Treated Utility Poles***

In May 2001, NIOSH received a request for an HHE from a union representing telephone and electrical workers in Vermont to evaluate health problems such as skin irritation, rashes, swelling, and headaches and their possible association with the use of creosote-treated utility poles. A telephone company in Vermont had introduced these poles that sometimes “bled” creosote after being exposed to the sun. In addition, the request mentioned that two pole fires had been reported when protective blankets used by workers became saturated with creosote during pole work. In Vermont, the telephone company shares responsibility for utility poles with 22 electric utility companies, while cable television companies also share the use of poles as “tenants.” NIOSH conducted investigations at several sites throughout the state and concluded that creosote poles can potentially create health and safety hazards for telephone technicians and electrical line workers. Recommendations to the telephone company’s management included instructing workers to: inspect poles upon arrival and return them to the supplier if they are wet to the touch or show signs of bleeding; use appropriate work practices and personal protective equipment when existing poles bleed; prevent contact of insulating equipment, especially gloves, with creosote and petroleum products; and discard gloves with signs of degradation. In addition, management should: conduct glove and electrical equipment inspection and testing; provide workers with an adequate supply of gloves, glove protectors, sleeves, and other needed protective equipment; and share with other companies material safety data sheets and pertinent chemical hazard information for all shared poles.

### ***Burlington, Vermont: Paving I-91***

In 1998, NIOSH responded to a request to evaluate workers’ exposure to an asphalt anti-strip additive and asphalt fume during paving operations along route I-91 in Vermont. The evaluation was conducted in response to management’s concern about paving crew workers’ reports of headaches, upset stomach, fatigue, rashes, itchy eyes, and sore throats when using hot mix asphalt. While there was no conclusive evidence to associate the polyamine anti-strip additive with reports of health problems, NIOSH investigators recommended substituting it with a non-amine additive. To minimize asphalt fume generation, NIOSH recommended applying hot mix asphalt at the lowest temperature possible at which quality control specifications can be maintained. In addition, NIOSH recommended workers use hearing protection and that engineering controls be implemented to reduce workers’ exposure to diesel exhaust, a potential occupational carcinogen.

## **Fire Fighter Fatality Investigation and Prevention Program**

The purpose of the NIOSH Fire Fighter Fatality Investigation and Prevention Program is to determine factors that cause or contribute to fire fighter deaths suffered in the line of duty. NIOSH uses data from these investigations to generate fatality investigation reports and a database of case results that guides the development of prevention and intervention activities. The following fire fighter fatality investigation was conducted in Vermont:

### ***Fire Fighter Dies When Wall Collapses***

On September 5, 1998, four fire departments were dispatched to fight a fire at a recycled paper warehouse. One of the fire fighters approached the structure and opened its large barn-like doors, but when he returned to the hose line, he discovered the self-closing doors had closed behind him. He was returning to re-open the doors, when, without warning, the parapet wall above the doors suddenly collapsed on him, resulting in his death. The NIOSH investigator concluded that to prevent similar incidents, fire departments should ensure that pre-fire planning and inspections cover all structural building materials and exterior walls and establish a collapse zone around buildings that have parapet walls that could collapse.

### **Extramural Programs Funded by NIOSH**

The following is an example of recent research grants funded by NIOSH in the state of Vermont.

#### ***Outcomes of Injured Employees***

With support from NIOSH, researchers at the University of Vermont and State Agricultural College are conducting a study to learn about worker injuries. Employees of Fletcher Allen Health Care in Burlington with work-related musculoskeletal injuries will be followed to better understand ways to reduce injury and re-injury rates, improve work performance, and increase productivity.

*Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).*

---

<sup>1</sup>U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

<sup>2</sup>DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

<sup>3</sup>DOL, BLS in cooperation with participating state agencies, Survey of Occupational Injuries and Illnesses, 2000.

<sup>4</sup>National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates*, May 2002.